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3400 Forest Pest Management

Hazard Tree Evaluation, Clear Lake and Frog Lake Campgrounds
Bear Springs Ranger District

Forest Supervisor, Mt. Hood NF

On May 31, Gregory M. Filip, Plant Pathologist from Forest Pest Management of the Regional Office, visited Clear Lake and Frog Lake Campgrounds on the Bear Springs Ranger District. Purpose of the visit was to discuss with District personnel hazard tree marking and management. He was accompanied by Len Dias, Recreation Forester, and Peggy Cameron, Resource Technician, both from the District.

Clear Lake Campground is located in an old-growth stand of Douglas-fir, western larch, and mountain hemlock. The understory is a dense growth of Pacific silver fir and hemlock. Very little shrub vegetation exists since the area has received frequent use.

The main concern in the campground is the hazard posed by the spike-topped larch and Douglas-fir. The 1980 Forest Pest Management rough draft of "A Guide to Estimate Failure Probabilities of Trees with Defects" lists dead tops of larch and Douglas-fir as having a "high potential for failure." This must be tempered by the fact that most of the failure in larch and Douglas-fir occurs in the roots and only a small portion occurs in the upper bole. Also, presence of a dead top does not necessarily mean high hazard potential. Other factors such as size of the dead top and target position in relation to the dead top also determine the degree of hazard.

We recommend the following for treating trees with dead tops in Clear Lake Campground. Do no treatment unless dead tops are five feet or more in length and are within striking distance of permanent structures or camping units. Because of their low resistance to decay, dead tops on hemlock and true fir should receive more attention than larch and Douglas-fir. Unless very little live foliage remains in the crown, felling spike-top trees should be done only as a last resort and rarely is this justified. Instead, trees should be climbed and only dead top removed if treatment is necessary.

Other hazard trees observed in Clear Lake Campground were a few dead trees, mostly suppressed silver fir and a few hemlocks with conks of the Indian paint fungus, which indicate severe internal decay. Such trees should be removed as soon as possible and pose a much higher degree of hazard than the larch and Douglas-fir with dead tops.

Frog Lake Campground is located in a stand of mostly second-growth Pacific silver fir and mountain hemlock with some old-growth larch and Douglas-fir. A stand of lodgepole pine exists near the lake shore. Some windthrown silver fir were observed near the entrance of the campground. Closer inspection of the root system revealed the presence of Fomes annosus, which commonly causes

a root and butt rot in true firs and hemlocks. The lodgepole pine stand appears to be growing poorly and may need to be thinned to increase true vigor and prevent attack from mountain pine beetle. Guidelines are available to determine the critical amount of tree growth needed to prevent mortality from bark beetles.

The District plans to develop vegetative management plans for both campgrounds. We wholeheartedly support this decision since both campgrounds show heavy use as indicated by soil compaction, loss of ground vegetation, and mutilation of trees. The understory silver fir and hemlock is very dense in portions at both campgrounds and needs to be thinned or removed. This will increase the vigor of the overstory and open the stand to more light for growth of ground vegetation. Because of the low resistance to decay, hemlock and silver fir should be discriminated against in developed recreation sites. Instead, Douglas-fir, larch, and pine should be encouraged or planted whenever possible in Clear Lake and Frog Lake Campgrounds.

The Forest Pest Management and Recreation Staffs of the Regional Office are available to assist the District in formulating vegetative management plans. If we can be of further assistance, please contact us.

JAMES S. HADFIELD

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cc:

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